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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,659

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Alphons Antonius Bruekers

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EXAMINER

SHIU, HO T

ART UNIT

PAPER NUMBER

2457

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/521,659

Applicant(s)BRUEKERS, ALPHONS
ANTONIUS**Examiner**

HO SHIU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, and 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-4 and 8-15 are pending in this application. Claim 16 have been newly added by applicant's amendment filed on 07/15/2009.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jutzi et al. (US Pub # 2003/0005301 A1, hereinafter Jutzi) in view of Parr (US Patent # 5,287,374, hereinafter Parr).**

4. With respect to claims 1 and 8, Jutzi discloses a method and a system comprising a computer readable medium, such as a memory, which stores a set of instructions and a processor which executes the set of instructions of determining whether an encoded signal has been encoded with a particular type of encoder , the method comprising the steps of: receiving at least a part of said encoded signal ([0047], [0048]); decoding the received signal using a decoder which performs the reverse operation of said particular type of encoder ([0055], lines 1-6); deriving a fingerprint

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from the decoded signal ([0055], lines 6-13)), comparing said fingerprint with fingerprints stored in a database ([0056], lines 7-12) but does not clearly disclose concluding that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database.

In the same field of endeavor, Parr discloses concluding that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database (col. 1, lines 25-31, col. 2, lines 19-40, col. 3, lines 49-54). Jutzi and Parr are analogous art because they disclose decrypting/decoding/demodulating data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi with disclose that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database as disclosed in Parr in order to be able to determine which encoder was used to encode the transmitted signal. One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings with one another to establish a more efficient system by ensuring that the correct type of encoder is being used so the user requesting the file is able to use the requested file.

5. Claims 2-4, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jutzi in view of Parr and in further view of Obviousness and in

further view of Suzuki (US Patent # 6,463,445, hereinafter Suzuki).

6. With respect to claim 2, Jutzi discloses receiving an encoded signal through a network ([0047], [0048]) but does not clearly disclose wherein said steps are performed by a server which receives the encoded signal from a client through a network.

In the same field of endeavor, Suzuki discloses wherein said steps are performed by a server which receives the encoded signal from a client through a network (col. 3, lines 27-36, The examiner notes that it would have been obvious to one of ordinary skill in the art at the time the invention was made that a client computer can be a server and vice versa since client computers can act as servers and servers can act as clients). Jutzi, Parr, and Suzuki are analogous art because they disclose decrypting/decoding/demodulating data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi and Parr with wherein said steps are performed by a server which receives the encoded signal from a client through a network as disclosed in Suzuki in order to receive information through a network. One of ordinary skill in the art would have been motivated to incorporate the teachings of one another in order to establish a more efficient system by being able to communicate through a network.

7. With respect to claim 3 it is rejected for the same reasons as claim 2 above. In addition Suzuki discloses further comprising the step of awarding (22) the client if the

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server concluded that the received encoded signal has been encoded with said particular type of encoder (col. 11, lines 3-5, col. 8, lines 52-67).

8. With respect to claim 4, it is rejected for the same reasons as claim 3 above, In addition, Suzuki discloses wherein said step of awarding comprises retrieving from the database metadata associated with the signal, and transmitting said metadata to the client (col. 11, lines 3-5, col. 17 lines 44, col. 8, lines 52-60).

9. With respect to claim 9, Jutzi discloses received encoded files through a network ([0047], [0048]); decoder configured to decode the encoded files received from the client ([0055], lines 1-6); a finger print extraction unit configured to extract fingerprint from a decoded file ([0055], lines 6-13), a database configured to store one or more fingerprints identifying respective structures of encoded files that correspond to the decoder of the server ([0056], lines 7-12) but does not clearly disclose a server which receives via a network files encoded by a client, the server station comprising: a server configured to received encoded files from the client through a network, the server comprising: a decoder configured to decode the encoded files received from the client; and concluding that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database.

In the same field of endeavor, Parr discloses a decoder configured to decode the encoded files received from the client; and concluding that the encoded signal has been

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encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database (col. 1, lines 25-31, col. 2, lines 19-40, col. 3., lines 49-54). Jutzi and Parr are analogous art because they disclose decrypting/decoding/demodulating data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi with a decoder configured to decode the encoded files received from the client; and concluding that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database as disclosed in Parr in order to be able to determine which encoder was used to encode the transmitted signal. One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings with one another to establish a more efficient system by ensuring that the correct type of encoder is being used so the user requesting the file is able to use the requested file.

However, Jutzi and Parr do not clearly disclose wherein said steps are performed by a server which receives the encoded signal from a client through a network.

In the same field of endeavor, Suzuki discloses wherein said steps are performed by a server which receives the encoded signal from a client through a network (col. 3, lines 27-36, The examiner notes that it would have been obvious to one of ordinary skill in the art at the time the invention was made that a client computer can be a server and vice versa since client computers can act as servers and servers can act as clients).

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Jutzi, Parr, and Suzuki are analogous art because they disclose decrypting/decoding/demodulating data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi and Parr with wherein said steps are performed by a server which receives the encoded signal from a client through a network as disclosed in Suzuki in order to receive information through a network. One of ordinary skill in the art would have been motivated to incorporate the teachings of one another in order to establish a more efficient system by being able to communicate through a network.

10. With respect to claim 10, it is rejected for the same reasons as claim 9 above. In addition, Suzuki discloses wherein in response to the server concluding that the received encoded files have been encoded with an encoder that corresponds to the decoder of the server, the processor communicates an award to the client (col. 8, lines 52-67).

11. With respect to claim 11, it is rejected for the same reasons as claim 9 above. In addition, Suzuki discloses wherein the award includes metadata associated with the encoded file transmitted from the database of the server to the client (col. 11, lines 3-5, col. 17 lines 44, col. 8, lines 52-60).

12. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jutzi in view of Parr and in further view of Obviousness and in further view of Suzuki and in further view of Matyas, Jr. et al (US Patent # 7,010,689, hereinafter Matyas).

13. With respect to claim 12, Jutzi, Parr, and Suzuki do not clearly disclose wherein response to the server concluding that the extracted fingerprint was not found in the database, the processor transmits a message to the client.

In the same field of endeavor, Matyas discloses wherein response to the server concluding that the extracted fingerprint was not found in the database, the processor transmits a message to the client (col. 11, lines 65-67). Jutzi, Parr, Suzuki and Matyas are analogous art because they disclose decrypting/decoding/demodulating data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi, Parr, and Suzuki with wherein response to the server concluding that the extracted fingerprint was not found in the database, the processor transmits a message to the client as disclosed in Matyas in order to be able to determine that there is no such file or an error has occurred. One of ordinary skill in the art would have been motivated to incorporate the teachings of one another to establish a more efficient system by being able to notify a user that the encrypted/encoded file is missing an important part of a file or has an error.

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14. With respect to claim 13, Jutzi, Parr, and Suzuki do not clearly disclose wherein in response to the extracted fingerprint not being stored in the database, the processor sends a request to the client to resend the encoded file.

In the same field of endeavor, Matyas discloses in col. 11, lines 65-67, col. 12, lines 8-15, if the hash values are not equal, the personal key client checks to see if the MAC that is generated is equal to the MAC that it received in the file header from the file server block. If they are equal, then the file is recovered correctly and its content has not been changed and the contents may be provided to the user which means that if the MAC is not equal, the file content has changed. Jutzi, Parr, Suzuki and Matyas are analogous art because they disclose decrypting/decoding/demodulating data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi, Parr, Suzuki, with wherein in response to the extracted fingerprint not being stored in the database, the processor sends a request to the client to resend the encoded file as disclosed in Matyas in order to be able to have the updated data so the hash and MAC would match. One of ordinary skill in the art would have been motivated to incorporate the teachings of one another to establish a more efficient system by being able to determine if the file has been received correctly and its content has not been changed.

15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jutzi in view of Parr and in further view of Obviousness and in further view of Suzuki

and in further view of Ko et al. (US Pub # 2003/0100299 A1, hereinafter Ko).

16. With respect to claim 14, Jutzi, Parr, and Suzuki disclose that the fingerprint is perceptually features of encoded files (Jutzi [0055], [0056]) but do not clearly disclose wherein the fingerprint is a bit pattern.

In the same field of endeavor, Ko discloses wherein the fingerprint is a bit pattern associated with the encoded files ([0125]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi, Parr, and Suzuki with the fingerprint is a bit pattern associated with the encoded files as disclosed in Ko so that the fingerprint is a random or pseudo-random bit sequence. One of ordinary skill in the art would have been motivated to incorporate the teachings of one another to establish a more secure system by providing random bit sequences.

17. **Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jutzi in view of Parr and in further view of Obviousness and in further view of Suzuki and in further view of Henderson et al. (US Patent # 6,353,666 B1, hereinafter Henderson) and in further view of Weinstein et al. (US Patent # 7,233,688 B2, hereinafter Weinstein).**

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18. With respect to claim 15, Jutzi, Parr, and Suzuki do not clearly disclose a plurality of client encoders; and a network which connects the client encoders and the server.

In the same field of endeavor, Henderson discloses a codec may be configured to perform encoding and decoding and to be configured to perform audio or speech coding (col. 4, lines 19-35).

In the same field of endeavor, Weinstein discloses a player is configured to play or use multimedia content connected to a network.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi, Parr, Suzuki, with plurality of client encoders; and a network which connects the client encoders and the server as disclosed in Henderson and Weinstein in order to encode different types of file from various locations. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by having the encoder/decoder be shared amongst the network in case the client/server/player does not have the appropriate encoder/decoder/codec.

19. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jutzi in view of Parr and in further view of Obviousness and in further view of Suzuki and in view of Haitsma et al, (Robust Audio Hashing for Content Identification,

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hereinafter Haitsma).

20. With respect to claim 16, Jutzi, Parr, and Suzuki do not disclose wherein the decoded file is an audio signal and the fingerprint is a bit pattern indicative of features of the audio signal.

In the same field of endeavor, Haitsma discloses wherein the decoded file is an audio signal and the fingerprint is a bit pattern indicative of features of the audio signal (abstract, introduction). Jutzi, Parr, Suzuki and Haitsma are analogous art because they disclose a file that has a hash/fingerprint/encryption key encoded in the file.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jutzi, Parr, and Suzuki with wherein the decoded file is an audio signal and the fingerprint is a bit pattern indicative of features of the audio signal as disclosed in Haitsma in order to determine what kind of song is being played. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by being able to use cryptographic functions to create a fingerprint to determine what type of audio song it is.

Response to Arguments

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21. Applicant's arguments filed 07/15/2009 have been fully considered but they are not persuasive.

22. With respect to claim 1, applicant's argue on page 9-10 that Jutzi and Parr do not disclose deriving a fingerprint from the decoded signal, comparing said fingerprint with fingerprints stored in a database, and concluding that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database. The examiner respectfully disagrees.

Jutzi in [0047], lines 8-10, discloses that the content decryption component receives a stream of encrypted content from the secure content driver (receiving at least a part of said encoded signal). Jutzi in [0055], lines 4-6, discloses that the content decryption component decrypts the encrypted content stream received from the secure content driver. It is known well in the art that the decoder/decrypter performs the reverse operation of an encoder/encrypter, therefore, the decrypter in Jutzi clearly performs the reverse operation of its encrypter. Jutzi in [0055] lines 6-10 discloses that the content decryption component calculates a hash value of code segments that perform functionality of the secure content driver (deriving a fingerprint from the decoded signal). Jutzi in [0055], lines 11-13 that the content decryption selects a stored run-time digital signature of a run-time image of the secure content driver. In [0056], Jutzi discloses that a run-time hash value is calculated by decrypting a digital signature of a run-time image of the secure content driver. The hash value that was calculated earlier is compared to the run-time hash value that is stored in the secure content driver

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when loaded in memory. With the cited passages, Jutzi clearly discloses comparing said fingerprint with fingerprints stored in a database. in [0059] and [0060], Jutzi discloses that if the security authentication is not received, the process terminates. However, if the security authentication is successful, a callback function is accessible to enable the content driver to receive clear decrypted content resulting in successful playback content to a requesting user. With the cited passages, Jutzi clearly discloses that a fingerprint has been derived from an encoded signal has a particular type of encoder if the compared fingerprint matches another in the database. However, if applicants disagree with Jutzi being able to disclose "concluding that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database", Parr clearly cures that deficiency.

Parr in discloses in title "identification of encoder type through observation of data received". Parr clearly discloses in col. 1, lines 25-31, that one method of overcoming the ambiguity as to which type of data was transmitted is to separately decode received information under both hypotheses and then determine the more consistent hypotheses by examining both sets of decoded data. With that passage, Parr clearly discloses that there is a method to decode the data (deriving a fingerprint), and then using the decoded data (fingerprint) to determine the more consistent hypotheses in which determines the type of data that was transmitted. Although Parr disclosed that it determines the type of data transmitted without having to decode the data, Parr clearly discloses in col. 2, lines 19-40 that it demodulates the modulated data

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which is equivalent to decoding the received signal using a decode which performs the reverse operation of said particular type of encoder. In col. 3, lines 49-54, it states that the key to identifying an encoder is to know which are the valid sequences for each hypothetical encoder and store the list of the valid sequences in a table and compare to the data actually received from a channel that is examined to conform to the hypothetical encoder's output in which identifies the encoder. With that passage, it is clear that Parr discloses concluding that the encoded signal has been encoded with said particular type of encoder if the derived fingerprint corresponds to one of the fingerprints stored in the database.

23. With respect to claim 4, applicant's argue on page 10-11 that Jutzi, Parr, and Suzuki do not disclose awarding the client wherein awarding the client if the server concludes that the received encoded signal has been encoded with said particular type of encoder, wherein awarding comprises retrieving from the database metadata associated with the signal, and transmitting said metadata to the client. The examiner respectfully disagrees.

Suzuki in col. 11, lines 3-5, disclose that in order for the present invention to perform the automatic format conversion, the sending application identifies the encoding format used. This clearly discloses the server concluding that the received encoded signal has been encoded with said particular type of encoder.

Suzuki in col. 7, line 44, discloses that content information is metadata. In col. 8 lines 52-60, Suzuki discloses that the transcoding manager sends the availability and

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contents information signal to the client. With those passages, this clearly states that Suzuki sends metadata to the client when it identifies with encoding format was used.

24. With respect to claims 8 and 9, applicants argue similar features of claim 1. The examiner respectfully disagrees as discussed above.

25. With respect to claim 11, applicants argue similar features of claim 4. The examiner respectfully disagrees as discussed above.

Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HO SHIU whose telephone number is (571)270-3810. The examiner can normally be reached on Mon-Thur (8:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HTS
11/16/2009

Ho Ting Shiu
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